

had been eaten off. Moreover, during the observations, there were numerous rains, some heavy, which may have washed away or covered discarded seeds. In contrast to the seventy seeds collected in and about the stone-pile ant nest in 1939, only two seeds could be found in 1940 which had been brought out of the *Formica* nest and dropped between the tufts of grass. These two, however, upon examination with a lens showed clearly the roughened surface close to the seed coat, where the caruncle had been gnawed away, without doubt for food. This indicates that the habit of finally casting out from the nest, the seeds from which the caruncle has been gnawed is relatively a constant behavior.

It was desirable to determine to what extent the *Trillium* seeds might be gathered by ant species other than *Formica neogogates* var. For this purpose some freshly gathered seeds were taken to another part of the grounds, at least one hundred feet from the group of plants. A seed was offered indiscriminately to any ant seen. If the ant picked up the seed and started off with it, that ant was collected for identification. Five ants responded and picked up the seed; none refused. Moreover, some ants too small to carry a seed, climbed upon it and apparently gnawed at the caruncle. Presumably, a considerable number of ant species, in the locality where *Trillium grandiflorum* grows, participate in the dissemination of the seeds.

The identifications by Mr. Wesson of ants tested at random, are:

1. A small specimen (brownish), *Lasius niger* var. *americanus*.
2. A larger ant (brownish), *Myrmica fracticornis*.
3. Two large black specimens. *Formica fusca subsericea*.
4. Large ant (black), *Camponotus herculeanus pennsylvanicus*.

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VICIA LATHYROIDES IN EASTERN VIRGINIA AND NEW TO NORTH AMERICA.—On March 30, 1937, while in Middlesex County, Virginia an occasion arose for an early-season field-trip into the region around Deltaville. The area is the tip of a small peninsula between the Rappahannock and the Piankatank Rivers, at the

point where they empty into the Chesapeake Bay. The soil is sand of the lower coastal terrace. Matted in the sand along the inner beach at Stingrey Point was found a small *Vicia*-like plant without flower or fruit. Specimens were taken and attempts at determination were unsuccessful. Handling of sheets of undetermined material recently brought these specimens to attention again. Some of them were sent to Mr. Robert F. Martin, of the Bureau of Plant Industry, Washington, D. C., for comparing with herbarium material. He has determined it as *Vicia lathyroides* L., a European species apparently not previously reported in North America. Professor Fernald informs me, however, that there is flowering and fruiting material in the Gray Herbarium, collected on May 21, 1931 and again in May, 1933 on Nantucket Island, Massachusetts, by Mr. and Mrs. Alfred F. Shurrocks, who wrote of it: "there are carpets, covering acres. . . . It also covers large portions of a field—an old barn lot— . . . and in scattering quantities in other fields." Sheets of the Virginia material have been placed in the Herbarium of the National Arboretum and in the Gray Herbarium.

The species will be studied more closely in the field during 1941 and carefully compared with European material.—A. B. MASSEY, Virginia Polytechnic Institute, Blacksburg, Virginia.

ELATINE AMERICANA AND *E. TRIANDRA*

M. L. FERNALD

The eastern North American *Elatine americana* (Pursh) Arn. has been generally recognized as an endemic species—by Pursh, Arnott, Torrey & Gray, Seubert, Fenzl and others. The habitually similar *E. minima* (Nutt.) Fisch. & Meyer was long confused with it, but in RHODORA, xix. 12 and 13 (1917), I pointed out the differences between them. Subsequently, Fassett, in RHODORA, xxxiii. 72 (1931), has differed from me, in treating *E. americana* as a variety of the largely Old World *E. triandra* Schkuhr and he has reaffirmed this opinion in vol. xli. 373 (1939). His reasoning, as stated in 1931, was, that in its terrestrial state *E. triandra* simulates *E. americana* which has only the terrestrial state and, although in deep water *E. triandra* elongates, like the